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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,897	09/23/2003	Raoul G. Fima	034584-9003	2495

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EXAMINER
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MASINICK, MICHAEL D

ART UNIT	PAPER NUMBER
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2125

MAIL DATE	DELIVERY MODE
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01/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/668,897

Applicant(s)

FIMA, RAOUL G.

Examiner

Michael D. Masinick

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                                 |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                            | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____                                                |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date : 1/8/04, 11/21/05, 2/16/06, 9/5/06, 6/18/07.

## **DETAILED ACTION**

Claims 1-20 are pending in this application. This is the first office action on the merits.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7, 9-11 are all dependent upon claim 1 and recite the limitation "the processor" or "the motherboard". There is insufficient antecedent basis for these limitation in the claims. The processor is not introduced until claim 2 and the motherboard is not introduced until claim 9 (which already has antecedent basis issues with regard to the processor). Claim 7 is further treated as if "the processor" was replaced with "the interface module". Claims 9-12 are not further treated as the issues are too great to guess as to the intended meaning of the applicant.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 13, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,568,825 to Faulk.

5. Referring to claims 13 and 16, Faulk shows a method for monitoring and controlling water consumption, comprising: generating signals indicative of a water consumption parameter sensed from a water-based system; receiving the generated signals to monitor the water consumption parameter; operating a fluid control device for limiting the water consumption in response to the received signal; and information processing of the received signal providing a communication interface for interpreting signals (Claim 1, parts a, b, c, and figure 1).
6. Referring to claim 14, Faulk shows a method as recited in claim 13, wherein the water-based system resides in a residential or commercial structure and includes one or more of a sink, toilet, dishwasher, washing machine, water heater, swimming pool and sprinkler sub-systems, requiring monitoring and control of the water consumption thereof (Column 3, line 16).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 5-17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,568,825 to Faulk et al in view of U.S. Patent No. 5,956,248 to Williams et al.
9. This is an alternative 103 rejection for claims 13, 14, and 16.
10. Referring to claim 1, 13, and 16, Faulk shows a system for monitoring and controlling water consumption, comprising: a sensor for monitoring a water consumption parameter in a

water-based system and for generating signals indicative of the operation thereof; an interface for receiving signals from the sensor; and a fluid control device operable with the interface module for limiting the water consumption in the water-based system. These are all clearly shown in claim 1, parts A, B, C – and figure 1, of Faulk.

11. Faulk does not specifically show that the module is an interface module to be entered into a power panel.

12. Williams shows an irrigation controller where individual modules, each assigned to a valve, are attached to a main controller BUS (motherboard). See Specifically column 4, line 66 through Column 5, line 39.

13. The concept of splitting a control system into "modules" is well known. Modules allow for both cost savings when creating a system (ability to customize and not purchase extra unneeded functionality), for expandability if needed in the future, and for easy replacement if a single module fails or is destroyed.

14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the concept shown in Faulk of having a sensing device, interface, and control system to control water consumption with the power panel and interface module system of Williams because of the reasons stated above (Shown in Williams in Column 6, lines 51-68).

15. The recent KSR vs. Teleflex decision by the U.S. Supreme Court states that the "Use of known technique to improve similar devices in the same way" should result in a finding of obviousness.

16. In this case, the basic concept of sensing a water consumption parameter, receiving the signal, and controlling a valve based on calculations made from that signal is known from Faulk.

The use of a module system with a power panel and communication BUS is known from Williams. Williams improved the previous irrigation controller systems by breaking the control system into modules that were easily replaceable and expandable. The same improvements can be made to the system of Faulk to arrive at the claimed invention, thus a finding of obviousness must be made.

17. Referring to claim 2, Williams shows a processor residing in the power panel, the processor being in communication with the interface module for interpreting signals from the sensor (Column 3, lines 12-14).

18. Referring to claim 3, Faulk shows wherein the sensor comprises a fluid flow sensor to sense the water flow within a component of the water-based system (InFlow Sensor 30).

19. Referring to claim 5, Williams shows wherein the fluid control device comprises a valve in a water supply line of a component of the water-based system (Column 2, "controller 2" shows valves).

20. Referring to claim 6, Faulk wherein the interface module controls the fluid control device for disconnecting a water or energy source from the water-based system (Abstract – "Shutting off flow").

21. Referring to claim 7, Faulk shows wherein the processor (read by examiner to be the interface module – note 112 rejection above) receives the signal from the sensor, and in response thereto, communicates with the interface module to close the valve in the water supply line (abstract).

22. Referring to claims 8 and 14, Faulk shows wherein the water-based system is in a residential or commercial structure and includes one or more of a sink, toilet, dishwasher, washing machine, water heater, swimming pool and sprinkler sub-systems, requiring monitoring and control of the water consumption thereof (Column 3, line 16).
23. Referring to claim 17, Williams shows wherein the processor is in a housing providing a circuit box for receiving the at least one sensor and receiver, each of the at least one sensor or receiver acting as a circuit breaker of the monitored water-based system to protect from malfunction of the water-based system. Examiner notes that the specification is not clear as to what is meant by this claim language. Specifically, the specification shows a variety of sensors placed at or under the device being monitored - so the sensors can't be placed inside the housing with the receiver in a common area. Williams clearly shows a housing for protection of the receiving circuitry to receive signals from an external sensor. Appropriate explanation is required if the claim language is maintained.
24. Referring to claim 15, Faulk shows a toilet being monitored. A tank-less toilet is a type of toilet and would have been obvious to monitor using the system of Faulk/Williams as it is a water using device.
25. Referring to claim 20, Williams shows a motherboard for receiving said processor, the motherboard having a connection for electronically communicating with one or more processors on other motherboards. It has been shown above the Williams contains a processor. All computer devices inherently must have a motherboard in order to use the functionality of the processor.



26. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,568,825 to Faulk et al in view of U.S. Patent No. 5,956,248 to Williams et al as shown above and further in view of U.S. Patent No. 6,195,002 to Evans Jr. et al.

27. Evans shows wherein the sensor comprises a pressure sensor connected to sense the pressure inside a component of the water-based system to generate an output signal when the sensor pressure exceeds a predetermined threshold.

28. Pressure sensing is well known in the control field and it would have been obvious to one of ordinary skill in the art to include a pressure sensor in the system of Faulk because "Low and/or high pressure sensors are coupled to main air-or water-carrying conduits to detect if the fluid pressure within such conduits drops below or rises above an acceptable, predetermined level" (Evans, paragraph 7).

29. Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,568,825 to Faulk et al in view of U.S. Patent No. 5,956,248 to Williams et al as shown above and further in view of U.S. Patent No. 6,061,603 to Papadopoulos et al.

30. Papadopoulos shows the use of network (specifically internet) communications with regard to controlling devices. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a network interface to allow the system to be programmed remotely and allow the system to output data to an external user display.

***Allowable Subject Matter***

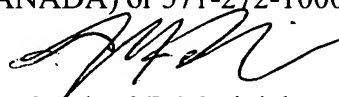
Claim 19 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Masinick whose telephone number is (571) 272-3746. The examiner can normally be reached on Mon-Fri, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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